EUROPE MUST HAVE COAL.

HER PRESENT NEED AMERICA'S NPRECEDENTED OPPORTUNITY.

Already the Shipments From This Country Have Assumed Large Proportions-But All Authorities Point to the Vast Field for Expansion in This Industry-Coal Famine on the Continent Now and

Consumers Turning to Us for Relief. What is spoken of as the coal famine from which Europe is suffering is a subject that is receiving constantly more attention in this co intry, not only because of the opportunities offered to American coal interests, but in view of the difficulties in the way of taking advantage of those opportunities, and in view of the bable effects upon American consumers. Trade navers and journals of economics take up the subject in every issue, and coal men and men connected with large industrial interests as well, find it of immediate concern. Exports of coal from the United States have increased already and the outlook is for a further augmentation of the export trade, limited only so far as the immediate future is concerned, by transportation facilities both on land and sea. But the important feature of the new conditions is that they do not betoken merely a temporary market, but presage a new growth of American commerce with constantly widening possibilities. And the new demand for American coal is not only for the bituminous or soft coal but also for anthracite. The exigencies at home have made European consumers ready to reach out at last for American hard coal, although persistent efforts of anthracite dealers to interest them heretofore have falled.

The figures for January show the exportation of 104,527 tons of anthracite coal, against 83,442 tons in January of last year, and of 492,207 tons of bituminous coal against 288,-297 tons. In the present conditions of the trade January is some time past and greater increases are likely as fast as facilities enable greater shipments and home requirements permit more attention to be devoted to the foreign demands. For the seven months ending with January, 1800, the exports of anthfaeite were 954,877 tons, and of bituminous 1.961,200 tons, while for the corresponding period ending with last January the figures were respectively 1,112,177 and 2,740,112 tons.

The situation as it appears to American Consular officers. American coal interests and foreign observers alike is big with possibilities. The United States Consul-General at Berlin, Frank H. Mason, reports to the State Department that the scarcity of coal in Germany and Russia, especially of the kinds used for coking and blam furnace fuel, jeopards the iron and steel industries of Germany, lessening the production of pig iron. The shortage in Germany is due in great part to the failure of one of Germany's chief sources of import supply, the mines of Great Britain. Importers both of anthracite and gas coals in Germany have applied to the United States Consul-General to be put in communication with American producers or dealers. Mi

"The situation has become critical and omi nous for the manufacturers and export trade of Germany. Numerous important glass, porcelain and machine factories in Silesia and Saxony have been obliged to shut down for want of fuel; there are a dozen electric lighting and power plants in this country which have less than a fortnight's coal provision on hand

"In Russia the rapid development of railway "In Russia the rapid development of railways and certain manufactures during the past three years has completely outrun the limited domestic coal supply and the Russian tovernment has sought to ease the pressure by suspending for an indefinite period the import duty of \$2.80 per ton.

"The principal wholesale agency here for Silesian soft coal is now seiling its scanty stock at \$5 per ton, delivered at Berlin, and there is a general panic among coal dealers, who are unable to provide coal for their customers at any price and can see no encouraging prospect

unable to provide coal for their customers as any price and can see no encouraging prospect of obtaining their next season's supply. Offers are made of \$4.04 to \$4.28 for bituminous lump

are made of \$4.04 to \$4.28 for bituminous lump coal in lots of 10,000 to 20,000 tons, free on board at Hamburg.

"Notwithstanding coal at the pit's mouth in West Virginia has sold during the past year at 80 cents per ton, the United States, which leads the world in this product and mined last year 218,333,000 tons of coal, exported only a bagatelle of 5,051,933 tons, of which 3,931,761 tons were merely carried over the frontier into British North America, and the rest want nearly all to Mexico and the West Indies, countries which lie at our very doors."

The New England Statist, considering the outlook, after making the preliminary obser-

outlook, after making the preliminary obser-vation that the mines of this country are capa-ble of producing double the quantity of coa that the markets available in the country de-

that the markets available in the country demand, says:

"Many years ago the experiment was tried of exporting anthracite coal. The people of England especially neither had nor would they be persuaded to provide themselves with the necessary appliances of stoves, grates, Ac., for burning anthracite coal, and the experiment ultimately had to be abandoned.

"With soft or bituminous coal the proceedings have been somewhat different. Nevertheless, the export business in this coal in the United States has never yet reached anything like a well defined and progressive feature of the foreign commerce of the country. Indeed, for a great part of the time in the immediate past, the imports of coal into this country have been vastly superior in volume to the exports therefrom, the Pacific coasts especially having long depended for their supplies upon the products of the English mines, brought thither in English bottoms. There have been recently, however, some very important sales of large amount with shioments already made or to be made in the near future to foreign ports."

There have been shipments to France for railroad purposes, to Italy for industrial concerns and to Cape Colony for the uses of the British navy, besides other shipments to various ports. The Coal Trade Journal in its current issue says:

"Instead of supplying only American con-

erns and to Cape. Colony for the uses of the British mayy, besides other shipments to various ports. The Coal Trade Journal in its current issue says:

"Instead of supplying only American consumers the United States will, in the future, supply a large part of the coal requirements of other parts of the world. As it has politically become a power of world-wide influence, so in the coal trade its products will be carried to the opposite hemisphere, where American coal has heretofore been a rarity, as well as supplying Europe and South America, where it has in the past been known only by the steam marine interests of those countries. "And it may further be considered that if all the world burned coal in the same proportion per capita as is done in the United States, the annual tonnage of the globe would need be five times the present amount.

"Having in mind the great future demand for coal, and the inevitable curtailment of the production from the limited coal beds of Europe it becomes apparent to the careful observer that the United States must be called upon to supply from its unifmited coal areas the fuel to supply from its unifmited coal areas the fuel to supply from its unifmited coal areas of Europe has not been needlegent in developing its coal resources; but its fullure to meet current domands shows that the foreign output is approaching the maximum. It may well be doubted if the limited coal areas of Europe will permit of a much greater amount than the present tonnage being mined each year at a cost that will meet competition."

Of twelve foreign countries produce more than enough for the home domands. Speaking of last year's business, the paper says: "A few countries show an actual loss in the amount of British coal received, showing that while great efforts were made to turn out coal, the British producer could not get enough to supply the demand from all possible customers. A notable feature of the statistics is that they show no coal shipped to Pherro Rico, Santiago or Cienfuegos in the West Indies,

overlooked."
The paper observes editorially speaking of the foreign demand for American coal: "With a continuance of the demand vessels will seek cargo on this side of the water and we shall thus be enabled to send a supply abroad at a thus be enabled to send a supply abroad at a cost delivered that will be no higher than British coal; the coal here chean, and the freight high, will offset the dear coal there and low freight. A very direct interest which the people of the United States may have in the matter is the almost certainty that it will soon result in increased prices here."

And again: "All the countries of Europe seem to be in need of extra quantities of fuel, Under the stimulant of this extraordinary demand the preduction will no doubt be in

Under the stimulant of this extraordinary demand the production will no doubt be in-greased, and there should be the opportunity for a steady growth in our business agross the water with some larger tonnages, if vessels usually seeking British ports for cargoes will but turn their prows in this direction. We have the coal in plenty and of equal quality to anything produced abroad."

The London Natist, under date of Feb. 24, eaid: "American coal is not only at or on the

way to all the principal scaling stations of the Atlantic, but is actually into the very heart of Europa. Hundreds of thousands of tous have been shipped, or are on charter for delivery in the Mediterranean, and even, it is said, direct into the northern forts of France and Germany. It is only the limitations of tonnage that are restricting the flow in the meantime, but the supply of tonnage will soon respond to the demand. At the present moment, we are informed that good bunkering coal can be obtained at from 8s. to 9s. per ton at American ports, and that the best shipping coal can be obtained at from 10s, to 11s, f.o.b. No coal is

obtainable now in Great Britain at any such

obtainable now in Great Britain at any such flaures.

"The cheapest coal just now is Scotch, and Scotch steam (which is not suitable for all markets) costs 15s. dd. f. o. b., while Northumbrian steam costs 18s. dd, to 18s., and best Cardiff 25s. or 28s. The curious fact is that the best American coal (said to be equal in quality to Welah) can now be delivered at the chief Mediterranean ports at from ds, to 8s, per ton less than coal from our principal and most favorably situated coal port, Cardiff. Needless to say that such a margin is enormous in an article on which profits are more often counted by pence, or even halfpence, per ton than by shillings.

by pence, or even halfpence, per ton than by shillings.
"At the same time the demand for Welsh, English and Scotch coal has not abated, for there is, beyond question, an actual dearth of fuel in France, Germany, Austria and Bussia, and also to some extent in Belgium.

"The pressure continues both for export and for the supply of our Navy, of the vessels taken up by the Government in connection with the war, and of our merchant service. Welsh coal is undoubtedly too high, and will have to come down before the competition of Northumbrian, Scotch and American coal. As a general counter-check to further advances we have the American supply, which month by month the American supply, which month by mouth may be expected to go on increasing. And we are among those who believe that

the American supply, which month by mouth may be expected to go on increasing. And we are among those who believe that American coul has come to stay."

The Berwind-Whete Coal Mining Company, which handles the Pennsylvania Railrond output of bituminous coal, has just organized the International Coal Company, to take charge of the foreign business, which all indications promise is to be of such large development. The Coal Trade Journal advocates the establishment of a line of coal carriers similar to the oil tanks of the Standard Oil Company and figures that such carriers with 7,000 tons capacity and 10-knot speed could transport coal to Liverpool in fifteen days at a cost of \$1 a ton, as against present rates of \$2,\$5 and \$4. Charles King Lord. President of the Cousolidated Coal Company of Baltimore, one of the largest interests in the bituminous market, in a recent interview on the demand for coal said that the prosperous condition of the soft coal trade was due to three causes.

"The first of these," he said, "Is that every factory in New England is ablaze. Again, we have developed a foreign market. Finally, and most remarkable of all, the United States War Department is the largest purchaser of soft coal in the world.

"The foreign trade is due to European belief in the maxim. In time of peace prepars for owar." The largest orders are from foreign governments, and have followed the policy of establishing chains of coaling stations, particularly in colonial possessions. England made the move and all Europe has followed. France is, perhaps, the largest buver of coal among them, but all are in the market, even England, which is florling need at present for all of the home product in the maintenance of the transports that are leaving continuously for establishing chains of coaling stations, particularly in colonial possessions. England made the move and all Europe has followed. France is, perhaps, the largest buver of coal among them, but all are in the market, even England, which is florling need at present for

gest of all, however, is the spectacle of the crited S ates Army standing at the head of the 1st as a censumer of bunker coal. Seventy-fve transports owned and operated by the Army are of the sea, transporting and retraits of it from an and entinually on the go, both in the Atlantic and the Pacific. Hundreds of the sands of tons of bunker coal are visit fleet, and hence the third of the reasons for the soft coal demand."

CITY AND COUNTRY POLITICS.

The Line of Cleavage in This State Con stantly Growing More Marked. The fourth section of the third article of the

resent State Constitution of New York pro-

vides that no county shall have four or more Senators unless it has a full ratio of inhabitants for each, and that no county shall have more than one-third of all the Senators and "no two counties adjoining, or which are separated nly by public waters, shall have more than one-half of all the Senators." The purpose of this provision, which can only be altered by a formal amendment of the Constitution approved by two successive Legislatures and ratified by the voters, was, and is, to preclude the city of New York, made up chiefly of the counties of New York and Kings, from ever gaining political control in the State, for although through growth of population a majority of the members of the Assembly may be elected from these two counties (which now have a representation of only 58 out of a total of 150), and although on a popular vote in New York a Brooklyn man may be chosen Governor, the Senate is to remain an obstacle against the adoption of any legislation which the country counties of New York, neting collectively, do not approve. Whatever may have been the intention of the Constitutional Convention which submitted this provision to the voters of New York for their acceptance or rejection six years ago, it is a fact, which is undeniable, that its adoption has aided in bringing about to a greater extent than perhaps neglit otherwise have been the case, the political segregation of the metropolitan from the rural counties of the State, a condition of cleavage, in political matters, further added to by the setting up of the Greater New York as a distinct civil division in 1897.

There are to be held two State conventions for the choice of delegates to the National Conventions of the Republican Party in June in Philadelphia and of the Democratic Party in July in Kansas City. The Republican Party in July in Kansas City. The Republican State Convention will be held on April 17 at the Grand Central Palace, Lexington avenue and Forty-fourth street, and will comprise 171 delegates. The Democratic Convention, the date for which has not yet been fixed, but which will probably be held if May, will comprise three delegates for each Assembly district in the State, or 450 in ail. In the Republican Convention New York city will have 348 delegates, while the country districts will have 623. In the Democratic Convention this city will have 180 delegates and the country Assembly districts 270, the Democratic Party athering to the Assembly district divisions as the basis of representation, whereas the Republican a topt as their standard the number of votes cast at the last proceeding general election for Republican nominees.

Formerly the politics of many New York countles, especially those along the Hudson

standard the number of votes cast at the last preceding general election for Republican nominees.

Formerly the politics of many New York counties, especially those along the Hudson River, were generally influenced by New York eity. Nowadays these counties, and most notably Westchester, Dutchess, Columbia and Uster, make common political cause with the other up-State and interior counties. Albany has a Republican Mayor, and such counties as Chemung, Seneca, Lewis, Clinton, Schenectady and Niazara, which were formerly doubtful or wavering, are new securely Republican; whereas Queens and Richmond, within the metropolitan district, are more strongly bemoeratic than before, and Surfolk, outside of the metropolitan boundary line, is more strongly Republican. Though the business relations of up-State to New York districts are as intimate as ever before, there has been a very marked tendency in recent years for the State voters to separate on familiar geographical lines, the Republican proponderance in the up-State counties increasing to the same extent, and in about the same ratio, as the Democratic proponderance in the metropolitan counties. The provision of the State Constitution limiting the power of New York and Kings over legislation may, therefore, have a justification in utility which was not discerned by its projectors when adopted.

OCEAN POYAGES FOR WHISKEY.

six Thousand Barrels Soon to be Sent Abroad to Be Returned Later to America.

From the Louisville Courier-Journal. BALTIMORE, March 8 .- Within the next few weeks there will be several large shipments from the bonded warehouses of this city of whiskey which has been in bond within a few months of eight years, for which time, by provision of law, this commodity may be stored without being subject to the internal revenue tax of \$1.10. About 6,000 barrels are said to have nearly reached the limit of free storage

have nearly reached the limit of free storage without duty, and of these 1,500 barrels are already prepared for export, and more than 4,000 will soon be so.

This veritable ocean of liquid refreshment is only in part the property of Baltimore and Maryland distillers, since owners in many western cities, particularly Cincinnati, have for years made this their bonding headquarters and the port of departure for their exported wares. The whiskey will cross the ocean and be stored in warehouses in English and German cities, and will be reshipped across the ocean as demand arises; virtually all of the thousands of barrels which make this pilgrimage being eventually designed for the American market.

The whiskey now being prepared for export is of 1841 and 1862 distillation, and since that time has only represented outlay to the owners. It will now cross the ocean, a process that is said to increase its excellence, and certainly increase its market value, and within a year or even six months, may return that pays all of the cost it represents to produce, and will yield a handsome margin of profit as well. The tax is only required to be paid when the whiskey is put on the market for sale, and hence goods shipped to Europe in bond are not subject to tax.

From the Cincinnati Commercial-Tribune. HUNTINGTON, W. Va., March 12.—Freemont Wooster, an aged citizen who has been in fee ble health for some time, fell from his cot this morning, a distance of two feet, and his CITY'S SCHOOLS ALL RIGHT. brings improvement and no backsliding. Now if that isn't food for optimism, what do optimists

RECENT PESSIMISTIC VIEWS OF THEM CHRERILY PUT ASIDE.

Veteran Teacher Points Out Long Step That Have Been Taken in Advancing the Physical and Mental Welfare of Both the Student's and the Teaching Staff.

There is rejoicing in pedagogical camps, over the passing at Albany of the bill, fixing the teach ers' salary schedule, and providing for the payment of those salaries, through a four-mill tax approp "It will be a comfort to us, and will relieve

the nervous strain of a multitude of landladies said a jovial Queens borough teacher, to a Sun reporter who asked her about the effect of the bill. The story of the teacher's salary conflict is like the tale of the wonderful mouse, "a long one and a sad one." It presumably began with the creation and survived the deluge; and by the time the Holt schedule went into effect, in Manbattan and The Brony, the trouble had waxed mighty. Salaries were small, and promotion painfully slow. It was possible to give twenty years' meritorious service, without receiving even the smallest raise in salary; and, when promotion did come, the attendant increase in salary was so small that optical nerves were strained to see it. The reform board abolished the old gradings

and promotion system, and figured out a schedule

that brought tears of joy to the demoralized eyes

but the schedule was subject to financial ability.

and there wasn't any financial ability. The Board of Estimate cut down appropriations, so that the schedule was valuable only as a testimonia to the moral character and good intentions of the Board of Education; and, once more, the teachers saw their hopes go a glimmering. Then came the Ahearn bill which rescued some of the pedagogues and set their feet upon the dry land, but eft others adrift. It established a minimum salary, fairly liberal, and also provided a minimum salary for teachers having served meritoriously for ten years, and another for fifteen years' service. The teachers in between the first year and tenth year provisions, and between the tenth and fifteenth years, were left to the mercy of the board making the complete salary schedule That board also dreamed dreams and saw vision of pedagogical peace and plenty; but the ruthless Board of Estimate once more showed an econom ical dispositon, and, in an attempt to adjust the appropriation to the Abearn bill, the intermediary eachers were necessarily left to fare rather badly

In the meantime salaries were held up while teachers' records were investigated, and the boards of certain boroughs having failed in the effort to make two plus two equal six, the salaries in those boroughs failed altogether to materialize Conditions seemed to demand further legislation and the present bill aims to meet the teachers needs. It provides for a general increase in salaries, beginning with a \$600 minimum for the women and an increase of \$40 each year up to the sixteenth year. For the men, there is a schedule beginning with \$900 and increasing at the rate of \$105 a year up to \$2,160. The salaries for principals and heads of departments are fixed. the teachers in boys' schools are to receive \$60 a year more than the corresponding teachers in girls' schools. The salaries are to be met by the four mill tax for educational apurposes, and the Board of Estimate appears to have been side

tracked in the matter. Presumably, the teachers are happy, but still the problems of the relative powers of the Borough boards and the Board of Education, the friction between local and central authorities, are unsolved. As things stand, the members of the Board of Education hold office for one year, at the will of the Borough or local school boards, and have no voice, in the appointment of the supervising and leaching staff, nor any control over its members, after they are appointed. One side of the fighting contingent, in the educational problem, claims that centralization of responsibility and power are the crying needs of the school system, that divided authority is enabling subordinates to escape accountability, and thereby impairing the discipline of the staff, and that the present local system of school administration is municipal extravagance, since, under it, there is one highly paid supervising official to every thirteen teachers. The opponents contend that the best interests of the boroughs demand local boards and that only through such a system can local interests be protected and advanced. What the end will be no man knows.

A SUN reporter, having in the course of numerous interviews with teachers and officials, gained an impression that New York schools were in a perilous state, at last encountered a pedagogical boards and the Board of Education, the friction

an impression that encountered a pedagogical rara avis. She didn't look like anything so for-midable, but the fact remains that, although a school principal, noted for her brains and ability

perilous state, at last encountered a pedagogical rara avis. She didn't look like anything so formidable, but the fact remains that, although a school principal, noted for her brains and ability and a prominent factor in the general war over school conditions, she is still an optimist, and has preserved a keen and strong sense of humor. "Of course we've gone through exciting times, she said joyously, but we aren't in such a had way, you know. The history of the New York school system is one of deliberate and unfailing progress. The leachers and schools have never lost a forward step once gained, and all the difficulties we bewall now will straighten themselves out by gradual evolution. Some things ought to be done to improve the discipline throughout the school system, but I wish you would tell the public to cheer up. The schools are in most flourishing condition, in spite of the wails of the various school factors. Now just look at the position of the teachers. A meritorious teacher literally has life tenure. She gets from \$600 to \$2500 for working 200 days out of the year. Under the new bill, she will have a constant increase in salary, reward for long service, and, after thirty years' service, a pension amounting to half pay. Absence on account of sickness is excused. Positions may be held through substitutes, and the hours have been shortened so that school is now dismissed at 3 o'clock instead of 4. Why, if we'd just sit down and think about it, we'd get fat over contemplation of the favors we receive.

"The chief trouble with teachers is their lack of enthusiasm and love of the work for the work's sake, and their tendency to gloom. Their sponsors in baptism ought to have named all of them Martha, for they are troubled about many things. They borrow trouble and cross bridges before they come to the condusion that the most valuable possession for a teacher is a keen sense of humor it is as rare as it is valuable. That's why it is so hard to get good teachers for boys' schools, and why an extra \$60 a year ba

That's where they differ from girls. They need to be punished often, but punished with imperturbable cheerfulness.

"Don't think I am complaining of teachers. If any one in our schools needs criticism, we principals are the ones. As is the principal, so is the school; and there are few ideal principals. We lack tact in dealing with pupils and parents; we show too little consideration for our assistant teachers, and the principals have, as a class, been opposed to the raising of pedagogical standards. The teachers haven't done much wailing about the higher professional standards, but the principals have lamented loudly. You can't really blame them, though. Did you ever see one of the present day examinations for principals? Well, it is a ghastly sort of ordeal; but the requirements aren't any too high, and we ought to be rounded up and told to take the examination or resign. Teachers must keep up with the march of progress, and sentiment musn't be allowed to stand in the way. You don't find any fifteen-year-old girls teaching in New York schools now. A teacher must be at least 18, and must have had high school education and normal training. A good deal of the pedagogics, &c., that she studies may not be practically applied in her work, but it is fine mental training, and broadens her ideas and theories. When experience comes it is more profitable because there is a theoretical application of its processes and results. The increase in the level of intelligence and general culture among teachers, within my memory, simply phenomenal, and there has been a wonderful improvement, too, in an unconscious standard of dress and manners.

"All that necessarily finds reflection in the work iand tells upon the pupils. Then look at the other improvements we have the best school buildings in the world, and even the old ones are being made remarkably good. These buildings have been opened in the evenings for lectures and clubs. Summer schools are held in them. Playgrounds have been established in their years and on the roofs of

if that isn't food for optimism, what do optimists feed upon?

"The difficulties of administration will gradually straighten out. In the meantime, the general public doesn't care tuppence about boards and boroughs, but each mother is exceedingly interested in Willy and Susie, and Willy's and Susie's special teachers. Willy and Susie are doing better work and under better conditions than ever before, and their teacher is a very superior article. That is surely satisfactory. I only wish the parents would come to the schools more, and get a better understanding of just what is being done for that same Willy and Susie. Home co-operation and a personal knowledge of teachers and confidence in them are exceedingly good things. Children would take more interest in their work if the home circle were more enthusiastically interested in would take more interest in their work if the home circle were more enthusiastically interested in the details and progress of that work. But, to go back to first principles, things aren't in a very bad way, in spite of administrative friction, and, now that teachers have their minds at rest on the salary question, they had better devote their un-divided attention to individual enthusiastic work in class than to legislative spheres, and leave the administration to work out its own salvation."

DEED RORE HOLES AND SHAFTS. The Deepest Penetrations Into the Earth

in Europe and America. The deepest oil well that has yet been in this country is in the valley of the Monongahela River about twenty five miles from Pittsburg and is not yet completed unless work has been resumed quite recently. A few months ago the hole had been drilled to a depth of 5,532 feet, or a little more than a mile, and then work was suspended on account of an accident. was a break in a rope that had been lowered into the hole, and, as a result, 1,000 feet of the rope and a string of metal attached to it dropped to the bottom and, at last accounts, men were at work fishing for the lost supplies. Late last year it was hoped to be able to resume drilling before a great while, and it was intended to sink the well to a depth of 6,000 feet

Thisoccurrence illustrates one of the difficulties deen boring Other works have been delayed for many months by somewhat similar accidents It often requires great patience and skill to remedy the trouble thus casually introduced into the work When the artesian well was dug at Grenelle, near Paris, a length of 270 feet of the boring rods suddenly broke off and fell to the bottom of the hole after a depth of 1.254 feet had been reached. It required nearly fifteen months of constant labor to pick up the broken parts and not pefore they were removed could the drilling be esumed.

We surpass all European countries in the depths o which a very few of our mining shafts have en sunk, but there are two borings in Europe that surpass our deepest completed work with the drill which is at Wheeling, W. Va., where the work was driven to a depth of 4.920 feet. The pore hole on the Monongabela, above referred to has already been driven to a greater depth than any other in this country, but if it is sunk to the proposed depth of 6,000 feet it will still be surpassed

by the two greatest European borings. The two deepest bore holes in the world were both sunk in Germany, at Government expense o ascertain the thickness of the coal measure and also whethersother beds underlay those that were known. The deeper of the two and the greatest depth yet attained is in the coal fields of Upper Silesia at the little mining town of Paruschowitz where the diamond drill has penetrated to the enormous depth of 6,570 feet. The second greatest depth is that at Schladebach near Leipsic, where the drill was sent down to 6.265 feet. With the exception of the borings on the Monongabela, and Wheeling and the leeper of the two wells munk at St. Louis, all the drilled holes that have reached an exceptionally great depth are in Germany. Here is a list of the deepest bore holes:

Parnschowitz, Upper Silesia... Schladebach, near Leipzig ... Monongahela (thue far sunk). Wheeling, W. Va Wheeling, W. Va.
Sperenberg (gypaun seeds near Berlin).
Lieth, near Altona.
En, near Stassfurt.
Lubtheen, in Mecklenburg...
Mt. Louis, Mo.
Sennewitz, near Halls...
Inowrazlaw, Posen...
Friedrichsaue, near Aschersieben...

Many thousands of wells have been sunk in this country chiefly in the search for petroleum r natural gas, but most of them are not over 1,000 to 2,000 feet deep. The greater part of the artesian wells in the country vary from 200 to .000 feet. The average depth of the many thousands of artesian wells, sunk for irrigation in the western half of the country, is 210 feet. It is in our copper-mining shafts on Lake Superior that we beat the world in this form of e on Houghton Peninsula began in 1895 and it will not be completed till next year when, it is expected, it will be the deepest shaft in the world, a distinction now held by the Red Jacket vertical shaft of the Calumet and Hecla, less than a mile away, which is down exactly 4,900 feet. It will not be sunk to a greater depth for from this level the company can obtain all the ore at that end of its property.

TO REGISTER FEATS OF STRENGTH. Dr. Anderson's Ergograph Has Worked Successfully at Yale.

NEW HAVEN, March 13.- How a man who directs the physical exercise of the 2,700 students of one of the largest American universities, besides having in his charge the gymnasium in which this great number of men are practising constantly, can find time to turn his ttention, or a part of it, to inventions is a puzzle to most of the people here; but Dr. William G. Anderson, associate director of the Yale gymnasium, has just completed a machine which he calls the ergograph which promises to revolutionize the methods of obtaining the results derived from the indulgence in gymastic work. The ergograph, which is another word for work-writer which the Yale physical director originated, has been set up in the gymnasium, where it received a thorough test the past week. The mission of the machine is to register in foot pounds the exact effort made in the performance of any feat of strength which can be accomplished in a gymnasium. It is used to ascertain the relative and comparative strength of individual groups of muscles. The nachine determines exactly, and as slow or

used to ascertain the relative and comparative strength of individual groups of musoles. The machine determines exactly, and as slow or rapid performance of the person whose efforts are being registered cannot affect it, the ergograph cannot be cheated.

The appliance itself is a most curious looking piece of mechanism. On an iron upright with a heavy base is what appears to be an oblong-shaped piece of board with paper pasted upon it. Behind the board are small springs and cog wheels like the works of a clock. Extending from the machine, for some length, is a pole, at the end of which is fastened a rone with a leather strap or belt attached. That is the appearance it presents to the average spectator, and is probably as puzzling as a Chinese newspaper. In reality, however, when its workings are watched and explained by its inventor it is really one of the most simple of modern scientific apparatus.

The amount of work a man does with his muscles is recorded on a moving surface by means of a stylus attached to the shortend of a ten-foot lever, the other end of which is attached, by means of the leather straps, to a man's body, and the ends are so calibrated that if in the performance of a test of muscle the part of the body to which the strap was attached moved two and one-half feet through the air, the stylus records a line of one inch at the recording surface. The machinery which moves the recording apparatus is clockwork, and is to be controlled in such an easy manner that a small bov could operate the machine.

Previous to the completion of the ergograph the methods by which the results of athletic work as regards benefits to the body were only attained by a process of the most complicated sort and unintelligible to the ordinary symmast, but now in the short space of an hour the complete measurements of an athlete, which show comparisons with the same muscles on the other side of the body, can be had. The ergograph is an instrument which woil determine always in plain sight, are recorded on cardinary search

SOLAR ECLIPSE ON MAY 28 IT WILL BE VISIBLE OVER A LARGE

PART OF THIS COUNTRY. he Eclipse Will Be Total and Condition Will Be Peculiarly Favorable for Ob-serving It-Preparations of Astronomers -A Chance for Amateurs With Cameras

WASHINGTON, March 17. - In one respect the

un's total eclipse of May 28 next will be without precedent. Its path, instead of extending over he sparsely settled regions that intervene between lows and the western coast as in 1878, or stretch ing over the watery expanses of the Pacific, as in 1883, when the United States had to send an ex pedition to the Caroline Islands, 4,000 miles west of South America, or let the eclipse go unob served, will cross the States of Louisiana, Mis sissippi, Alabama, Georgia, South Carolina and North Carolina, touch Virginia and traverse very fairly settled part of the Republic which i overed with a network of rail. The track of totality begins on the Pacific Ocean just west of Mexico at sunrise, trends due eastward over Mex ico, enters the United States very near New Or leans, and extends northeastward over Mobile and Montgomery, Ala., passes close to Atlanta Ga., and Columbia, S. C., over Raleigh, N. C. and leaves this country in the region of Norfolk Va., and Cape Henry. Besides the cities named, it includes thirty other towns that are large enough to find place on the smaller maps. After leaving the United States the path of the eclipse crosses the Atlantic Ocean and touches Europe at Coimbra Portugal, takes in Algiers and northern Africa and terminates near the northern end of the Red Sea at sunset. The eclipse will last about one minute and twelve seconds near New Orleans and one minute and forty seconds near Norfolk. Hitherto only the favored few who could afford to spend days, and perhaps weeks, in travel have een able to view the great spectacle; this time million of people at least can witness the phenomenon from their own doorsteps. Other millions dwell within an easy day's journey of the path of totality, and far more than half the entire population of the country will be able to witness portion of the show at home, for a partial eclipse will be visible in every State east of the Mississippi Nature has arranged no similar display with such consideration for the masses within a generation otal eclipses were visible in the United States in 1867, 1878 and 1889, but their paths did not travers closely settled regions.

The accessibility of the path of the eclipse will render the coming event of incalculable value to science. Preparations are being made by nearly every scientific institution in the country to place its best instruments and most skilled observers in the field. The United States Government will spend thousands of dollars establishing observation stations along the path of the eclipse Incle Sam's chief star Igazer, Prof. Brown of the Naval Observatory, will have charge of the

Government's principal observations. "Greater results are probable from the observa ions this year," says Prof. Brown, "than from any taken heretofore. During the half decade since the last total eclipse there have been great strides in improvements in the apparatus employed in the work. Photography has been wonderfully developed and the improvements in photography alone may effect remarkable discoveries during this year's eclipse. Moreover, the case with which the eclipsed region may be visited will increase the number of scientific observ ers enormously. The Government is already preparing to occupy several stations along the path of totality. The necessary apparatus is being gathered and arranged and men specially adapted for the work are being engaged and their special parts in the observations are being outined. Congress has allowed \$5,000 to the Naval Observatory for expenses and \$4,000 to the Smithsonian Institution. The Naval Observatory will send out two expeditions. The points from which they will observe the eclipse have not yet been chosen definitely, but they will probably be located about 200 miles apart, one in North Caro ine and the other in Georgia. A floating cloud which might obscure the eclipse at one point may not affect in the slightest the view from the other, and it is to obviate the danger from cloudiness

that has caused the division of forces. "In anticipation of this year's eclipse the Weather Bureau has for three years past beer collecting data of the weather conditions in past Mays along the line of totality at all times of the day. The result of this investigation has been show that there is less danger n central Georgia and eastern Alabama, nearly due south of Atlanta, and that therefore this is the best region for locating the eclipse stations so far as that consideration is concerned. The scientists of the Observatory, however, have taken thought of other conditions also, and although the period of eclipse is longer in the neighborhood of Norfolk, have about decided to estab lish stations on high ground in North Carolina and Georgia. The stations selected will be ocruuled two or three weeks before the eclipse. The natruments will be erected and the part each man s to take will be thoroughly rehearsed. There will be a careful division of the work during the eclipse. Each man will be assigned to some particular duty and he will bend every effort to the gathering of all data possible in that connec-tion. There will be but a minute and a half in which to make all the observations, and it is imperative that the whole affair should be carefully ystematized and that each man should know efinitely and absolutely what he is to do.

"No previous eclipse has had the attention "No previous eclipse has had the attention of so many skilled observers as will watch this one. The Smithsonian Institution will have a corps in the field under Prof. S. P. Langley. Princeton College will have a force under Prof. Young; the University of Pennsylvania one under Prof. Stone, and the Yerkes Observatory will conduct an expedition with Prof. Hale at its head. These are only a few of the institutions which are preparing for the field. In fact, practically every college and scientific institution in the country will be represented. All toid, probably a hundred expeditions of this kind will be sent to the path of totality well equipped for some

which are preparing for the field. In fact, practically every college and scientific institution in the country will be represented. All toid, probably a hundred expeditions of this kind will be sent to the path of totality well equipped for some portion of the work.

"The echipse will be a great attraction for amateurs persons who own photographic outfits or other scientific instruments used in observing the phenomena of the solar eclipse. Letters have been received at the observatory which warrant the prognostication that probably 1,000 of these unattached amateurs,will be somewhere along the path of the eclipse. The Government does not discourage these amateurs, but rather gives them every encouragement, and courts contributions of photographs and data from them to add to the Government records. It is remembered that one of the finest sets of photographs of the eclipse in India in 1896 was taken by an amateur with a home-made camera, but one having an excellent lens. Amateurs have been a help in the field in many instances, and they are always ready to volunteer their services. When Prof. Cambell of the Lick Observatory went to observe the eclipse in India he took only his wife for assistant; on the field he found all the trained volunteers necessary to manipulate the seven instruments he made use of.

"The expeditions to be sent out by the Naval Observatory will not be large ones. They will consist probably of five or six observers, including photographers. But these men sent will be the best procurable. The Government naturally has superior resources to draw on for making observations. It has at its disposal the lenses and spectroscopes gathered during the last twenty-five years, and its appropriation of money is probably larger than any of the institutions could afford to devote to the purpose. Large instruments are now being prepared for use next May. A number of special photographic instruments and streams and the elevation of points along the path of totality, together with the exact time of the eclips

From the Cleveland Plain Dealer "Went home Thursday night and found my wife ill. Symptoms alarming. Dosed her best I could, Friday morning she was no better. Felt worried wife dull and stupid. No life to her. Started fo doctor. Struck by happy thought. Turned bac-cure complete. "What was it?"
"Simple as pic. Just said Too bad you have too give on harving day, my deer. She bounced in

"Simple as pic. Just said Too bad you have too sick on bargain day, my dear. She bounced ip. "What!" she cried; 'how stupid of one to forget. In five minutes she was up and dressed and friding "Wouldn't it have been cheaper to have fiched

CALVIN, A CHURCH GOING DOG. And a Young Setter That Taught Himsel to Say His Prayers.

Calvin, a distinguished looking yellow dog was first seen trotting down the streets of a Ten lessee town upon a summer Sunday morning just as the church bells were ringing. He passed the Methodist and the Bantist church without even turning his head, halted tentatively at the entrance to the Episcopal church, but went on to the Old School Presbyterian church, which was square and red, and uncompromising looking. slipped unobstrusively inside, lay down in a side aisle, dropped his nose between his paws, and paid unwinking attention to a Blue Light sermon, now and then softly thumping the floor with his tail at the most bristling doctrinal points.

Thus he earned his name-Calvin. The town laughed over it, but took Calvin to its heart. He was free of every house, but boarded around in a way to suggest itinerant experience. He would go three times a day for meals to one particular house for perhaps a week, then quarter himself upon some family in quite another part of town. He slept always in the market house where the town authorities had set for him a snug kennel He might have lived there altogether if he had chosen the market keeper, in fact, was a little touchy over the fact that Calvin would not eat at home. But the dog chose his boarding house and kept to it regularly, although sometimes it was more than a mile from his proper abode.

He never missed a sermon or prayer meeting at his own church unless some big man of another denomination was preaching in town. Then Calvin was sure to be among the big man's hearers. Once when a Bishop came to preach for the Metho dists some lads tried to coax Calvin to his own prop Presbyterian church, wagging his tail as though conscious of a good deed, but the minute they stepped over the threshood, he turned and went full tilt for the Bishop's church, where he got a place in front of the pulpit and listened decornals for two hours.

full tilt for the Bishop's church, where he got a place in front of the pulpit and listened decorously for two hours.

He seemed to know instinctively when distinguished visitors were expected. No matter whether they came by boat or train or stage coach, he was unfailingly on hand to greet them, and follow them to their stopping places. He never missed a political speaking, though if he had a preference between Whig and Democratic oratory, he kept it to himself. Way was made for him everywhere. If the speaking or the sermon was at night, it made no difference. It was the same with arrivals and departures. Calvin sped the parting as he had welcomed the guest at any hour of the twenty four.

How a creature so excellent, so dignified and so well beloved, came to have an enemy is hard to understand. It is likely he suffered for his virtues, and was poisoned by some scampish their intent on market plunder. He was found stiff and cold in his kennel one morning. The city council voted him a funeral and passed resolutions of regret, to be spread upon its minutes. The whole town was sad, and all the children went to the funeral.

lutions of regret, to be spread upon its minutes. The whole town was sad, and all the children went to the funeral.

Near the same town lived a man much given to hunting. He had a fine setter puppy, the playmate of his half-dozen small children. The dog was wonderfully imitative, and at last caught the trick of saying his prayers. He would spring up in a chair, face about, put his fore paws upon the back of it, drop his head upon them, and not stir until somebody said "Amen." That made great sport for the youngsters, but nobody outside knew the puppy's accomplishment. Hy and by, when he had grown into a fine, lusty, young dog, gypsies stole him and started away with him. His master went after them, but was told it was impossible that his dog could be there. He described a pure white setter. The only dog in camp was also a setter, but white "ticked" with orange yellow. His eyes assured him the gypsies spoke the truth—there was the dog with yellow fiecks all over. His eyes also assurred him that the animal was his own in spite of the changed coat. He turned to the gypsy nearest and asked: "Is yours a trick dog."

The man shook his head, saying "He knows nothing but to run." The other man whistled slightly and said: "Say your prayers, Elmo". At once the dog darted to a chair beside the fire, scrambled into it, put up his paws and dropped his head upon them. At the call of "Amen," he sprang down and raced to his master, who took him home, yellow flecks to the contrary notwithstanding.

ENGLISHMEN SEE BETTER THAN WE An Optician Sava the Strong Sunlight Here Hurts the Eyes.

"There are more people with defective eyesight in the cities of this country than you will find in Great Britain or Ireland," said the naturalized New Yorker who served in the British Army when he was a very young man and who is now an optician. "I do not judge by the number of people who wear glasses here, as in American cities glasses are worn if there is the slightest trace of nearsightedness, while few persons wear glasses for this cause in the old country unless they are so nearsighted that the wearing of glasses is a

AN EGG DID IT.

Wrote Her Name on the Stell, and the Other End of the Story lein Cuba.

From the St. Paul Glot. FORT DODGE, Ia., March 16-This city has become one of the centres of the egg and poultry business for the West. Duing the shipping season in the summer monhs large forces of girls are employed handling eggs taken from pickling vats in the egg house, preparatory to shipment. One of the girls selected a large, smooth egg, and, in a monent of day dreaming wrote her name and addess upon it with an in-delible pencil. It was paced in a case with 277 others and shipped to lew York, where it found its way to the warehouse of an exporter and was one of the first shipments of American eggs made

to Cuba. Weeks slipped irto months, and the young lady forgot her ropantic dreams of summer days and egg shells, bit the maiden's message was working out her destiny. Early in December she received a etter which bore the postmark of Guines. Cuba. On the upper right-hand corner of the fivelope were the words "official business." These were carefully cancelled and in the regulation place was a marcon-colored stamp. On pening it she found the following letter inclose:

INITED STATES SIGNAL CORPS

(INTED STATES SIGNAL CORPS, TELEGRAPH OFFICE.

GUINES Cuba, Dec. 14, 1809. Miss Lizzie Gilday, 'ort Dodge, Ia. I am sure you had no idea, into whose hands and to what distant lands the egg upon which you wrote your name would fo. It came with a large shipment from the Usted States, and was purchased by a Cuban mercapit here, who, being unable to read English, brought it to me for translation. I would be very glad to have you answer this letter, as I am unfous to know the one who adopted so novel a nethod of correspondence. I have a camera ad have had a snap shot taken of myself with the egg in my hand. If you care for one of the setures let me hear from you. Very truly.

CHARLES PERCY H. SMITH.

This letter was promptly answered with a request for the picture, which arrived in due time, with another letter, in which arrived in due time, a more detailed personal account of himself.

Needless to say, this letter was answered as the first. Uncle Sam's excellent mail facilities assisted the young people in overcoming the obstacles of time and space. Letters followed fast if not furious, but the communications were of such nature that the public is not entitled to their contents. Sufficient to relate that the results have been so satisfactory that a recent letter from the Cuban Isle intimates that Mr. Smith will soon secure a leave of absence from his Governmental duties, and his vacation will be speat in lowe.

BARGE OFFICE CHILDREN.

LITTLE TRAVELLERS WHO COME FROM EUROPE ALONE.

Chap of Fifteen Months the Record Holder as Regards Age-Children Who Have a Part in Tragedies-Plenty of Friends to Care for Them on the Way.

In the centre of the big examination room at the Barge Office in a compartment shut off by an iron railing from the surging crowd of confused and wondering immigrants. In this casis various officials have their desks and do their work, and at one side stands a well-worn bench which, if it could speak, could tell stories that would make any well-regulated mother look tearful and hug her own babies tightly. After the arrival of any large steamship carrying steerage passengers, this bench is occupied by a row of children, who watch the crowding immigrants outside the railing with wonder and the officers inside the railing with undisguised terror. Occasionally one of the small boys or girls grine cheerfully at the passing show or rubs grimy knuckles into red eyes and cries in drizzling, suppressed fashion; but generally the little ones stare at their surroundings with dry, frightened eyes and do not stir or make sound. They are the children who are travelling alone, coming from Europe to friends or relative in this country, and when, in all kindness, they are separated from the immigrants with whom they have become familiar aboard the ship, and are for safety stowed away on the bench they give themselves up for lost and huddle together in mute misery

Luckily they fall into the hands of two women. and women have a happy faculty for understand ing child suffering and relieving it. Both of the women examiners have friendly eyes and kind voices, and can talk at least a few words of any language the children may have been used to bearing in other homes; so they usually have little difficulty in establishing diplomatic relations with the small travellers and finding out all that has to be known. The older children, from 10 to 15 years of age, are as a rule easily disposed of. They know their stories and their destination, and are tagged with cards giving the addresses to which they are to be forwarded, and they are turned over to the transportation agents, or are sent down to the tetention rooms to be held until word is received from their friends. Still even these older children often fail to have the definite addresses of the friends to whom they are going, and arrive here, billeted simply to New York, Chicago, San Francisco, &c., and serenely believing that if they can reach the city in question they will be able to find their friends without any trouble. Sometimes in such cases a fellow immigrant from the child's native town can furnish the necesary information. If not the officials institute a search for the friends and the child is kept in the immigrant quarters at the expense of the steamship company until the friends are found or the search is abandoned. In the latter event the child is sent back by the next ship, unless some responsible person or some charitable society in this country will assume the responsibility of his care and support.

Among the older boys many runaways are found. They have secured money for their passage, in one way or another, often by looting the amily purse, and reach here without a cent and, perhaps, without even a friend in the country. They lie stoudy, if inconsistently, about the circumstances of their leaving home, kill off, at one fell swoop of inventive imagination, all the members of their families, so that there will be no one to whom they could go back, and, if a tony hearted board does decree that they shall sent home, disappointment, and a lively sense of thrashing to come move them to desperate woe. Frequently before the steamer arrives a cable despatch reaches the Barge Office outhorities telling them to look out for a runaway and send him back, so the young adventurer is doomed to failure before he comes down the gang plank. On the other hand, parents are sometimes glad to be relieved of a troublesome charge, and it is not an unusual thing to find a child whose parents have given him money enough for his passage, in order to get rid of bim, and will not receive him if he goes back to them.

From 2.000 to 3.000 children come alone to the United States every year, and many of them are not more than 5 or 6 years old, while children only 1 or 2 years old are not unknown in the ranks. Some time ago a little boy fifteen months old, turned up at the Barge office in search of a Chicago aunt. He couldn't wait, but his lungs were in good working order and he gave a royal exhibited and send him back, so the young adventurer is

so nearsighted that the wearing of glasses is a positive necessity. But, taking it on the whole there are more people here whose eyesight begins to fall at a comparatively early age than in England, Ireland or Scotland, and fewer people who have exceptionally keen eyesight.

"In the Birtish Army you will find a dozen men with exceptionally good eyesight for one that you will find in the American Army, and I know a good many soldiers in this country. I once knew a private of the Pirst Leicester Regiment who has since been killed in the fighting near Ladysmith. This man had such keen sight that he could tell the time by a church clock at a distance of several miles, yes, strenge to relate, he could not read very small print in a book. I also knew a man in one of the Lancer patrols who had wonderful eyesight. In the Transvaal long ago what appeared to his watchful chums one day as a mass of yeldt beather, dim and blurred in the distance, was seen by him as an ambuscade cunningly compared to his watchful chums one day as a mass of yeldt beather, dim and blurred in the distance, was seen by him as an ambuscade cunningly compared to his watchful chums one day as a mass of yeldt beather, dim and blurred in the distance, was seen by him as an ambuscade cunningly compared to his watchful chums one day as a mass of yeldt beather, dim and blurred in the distance, was seen by him as an ambuscade cunningly compared to his watchful chums one day as a mass of yeldt beather, dim and blurred in the distance, was seen by him as an ambuscade cunningly compared to his watchful chums one day as a mass of yeldt beather, dim and blurred in the distance, and the propertion than and his country than here propertion of sunny days, and the sun't propertion than in the limits have been been personally and the propertion of sunny days, and the same part of the propertion of sunny days, and the sun's rays are more vertical than in more northerly continued.

"In every heard of the propertion than in the limits have been been been been been b and unblushingly hugged the little Italian boy who ast rext to her on the bench; and all the immigrants who had come over on the ship were her confidential and devoted friends. She could have chased grandparents around the globe without molestation just on account of her dimpled and confiding babyhood. Another wee woman who came a few days later found the world a harder proposition. Her mother was dead and she had left Europe with her father, but two days out from New York the father committed suicide, leaving no indication of his destination of no money for the baby who was too young to give the officials any assistance in tracting friends or relatives. The poor little tot, introduced so early to the tragedy of life, was treated with the greatest kindness by the other immigrants and was adopted here in New York.

The children play an important part in many Barge Office tragedies, even when they are not travelling alone. Many a mother coming with her children to join a husband from whom she has been separated is turned back from home and happiness because one of her children has favua or eye disease and cannot be admitted to this country. Unless there is another of the children who is not a minor and who can take the sick child back to Europe the mother must go, and the father who has probably been slaving for years in order to get enough money together to send for the family sees his dreams and plans melt into thin air. Such situations are particularly common these people favus, the contagious scalp disease so dreaded here, is welcomed sometimes as a biessing, because it grants exemption from military duty and no precautious are taken to prevent the children from contracting it. Of course, it is the duty of the steamship company to refuse passage to anyone suffering from the disease, but many cases come through and have to be turned back here.

Another class of drama, in which the children are contracting it.

have prominent parts, is played more often than anyone outside of the Immigration Bureau would imagine. In this case, too, a husband has left his anyone outside of the Immigration Bureau would imagine. In this case, too, a husband has left his wife in Europe and has come to America to make a fortune. After several years he has saved enough money to prepare a home and send for his family. He forwards the good news and the passage money and when the ship arrives he presents himself at the Barge Office, excited, impatient, radiant—to meet a crying, frightened wife, who has been unfaithful to him during the separation. Time after time the scene has been enacted and has run the whole wretched gamut of grief, shame and rage. Sometimes the husband accepts the situation, in dull shames sometimes he is even kind to the woman and blames himself for having left her alone. More often, he raves and swears that she may go back, that he will not give her a home or exports her. There is where the children come upon the stage. The mother is their natural guardian; and, if she goes back to Europe, the children must go with her. This fact is explained to the man, who rages, argues, implores, and, in nine cases out of ten, gives in to the father's love and longing in his heart, and accepts the unhappy wife for the sake of keeping his children. There the Immigration Bureau's responsibility ends, and the curtain is rung down. How the play ends, the bureau's records cannot show.

Big Kentucky Families.

From the Lexington Herald.

In conversation with a gentleman from Magoffin a few days ago, he gave some exceedingly interesting facts about the number of voters of some of the families in that county. There are about nineteen hundred voters in Magoffin county, and of these one-seventh belong to three families. There are ninety-four Howards, of whom about half are Democrate and half are Republicans; eighty-seven Patricks, of whom seventy-seven are Republicans and ten Democrats; eighty-one Arnets, of whom seventy-nine are Democrate and control of the Republicans.